

Department of the Interior
DECISION ON IMPLEMENTATION OF
SECTION 3406 (b)(2) OF THE
CENTRAL VALLEY PROJECT IMPROVEMENT ACT
October 5, 1999

INTRODUCTION

Section 3406(b)(2) of the Central Valley Project Improvement Act, Pub. L. No. 102-575, Title XXXIV (CVPIA), directs the Secretary of the Interior to:

dedicate and manage annually 800,000 acre-feet of Central Valley Project yield for the primary purpose of implementing the fish, wildlife, and habitat restoration purposes and measures authorized by this title; to assist the State of California in its efforts to protect the waters of the San Francisco Bay/Sacramento-San Joaquin Delta Estuary; and to help to meet such obligations as may be legally imposed upon the Central Valley Project under State or Federal law following the date of enactment of this title, including but not limited to additional obligations under the Federal Endangered Species Act.

Project yield is defined in section 3406(b)(2) [(b)(2)] as the delivery capability of the Central Valley Project (CVP or Project) during the drought period of 1928 - 1934 as it would have been with all facilities and requirements on the date of enactment of the CVPIA (October 30, 1992) in place.

This final decision, and its three attachments (collectively, the Decision), sets out the calculation of CVP yield in accordance with the statutory definition (Attachment 1), the method of accounting for use of the dedicated yield, and procedures for management of the dedicated CVP yield. Attachment 2 sets forth the process for implementation of fish protection and habitat restoration actions proposed or likely to use (b)(2) water. Attachment 3 summarizes the comments received from the public during the 30-day public comment period and the responses of the Department of the Interior (Interior) to those comments. Attachment 3 also lists the comments received from the State of California during Interior's consultation with the State and Interior's response to those concerns. The Decision is the final agency action and supersedes the Interim Decision of July 14, 1999. The July 14, 1999 interim decision and the accounting system it prescribed were developed and applied, in the context of pending litigation, to account for yield

dedicated and managed in the 1999 water year, defined in a court order as March 1, 1999 through February 28, 2000. This final decision setting forth the accounting methodology and (b)(2) policy to be applicable in future water years will be applied effective October 1, 1999.

Interior provided a 30-day public comment period on its proposed decision on the accounting methodology and other aspects of the (b)(2) policy. Interior has also conducted extensive consultation with the State of California on (b)(2) implementation. That consultation began before the Interim Decision with telephone consultation. Following the release of the Interim Decision, Interior and the State, including the Department of Water Resources and the Department of Fish and Game, have met at least nine times. During the consultation, several issues regarding coordination were identified and have been addressed in two sections of this Decision, the Accounting Process, section II. C., and Coordination, section VI, as well as in Attachment 2. Additional issues regarding the relationship of (b)(2) to the Coordinated Operations Agreement (COA) were also identified. Interior and the State have determined that those issues should be addressed in renegotiating the COA.

In developing this final decision, Interior has sought to effectuate the statute in accordance with the language of the statute and the intent of Congress. The first two purposes of the CVPIA as set out in the statute are to protect, restore and enhance fish, wildlife and associated habitats in the Central Valley and Trinity River basins, and to address impacts of the CVP on fish, wildlife and associated habitats. Section 3402(a) and (b). These overall purposes of the CVPIA are reflected in the primary purpose of the water dedicated under (b)(2) – implementing the fish, wildlife, and habitat restoration purposes and measures authorized by the CVPIA.

Consistent with these purposes, Interior interprets the requirement of section 3406(b)(2) that 800,000 acre feet of yield be dedicated annually, coupled with the definition of yield based on the drought period of 1928-1934, as requiring that the specified quantity of water be provided even during the driest of times as well as, consequently, during conditions of wetter hydrology. Thus, the water dedicated under (b)(2) is to be a reliable supply of water for the environment under varying hydrologic conditions.

Interior has calculated the yield of the Project in accordance with the statutory definition, and also has developed a system that accounts for the amount of yield dedicated and managed annually for (b)(2) purposes. The annual accounting of yield dedicated and managed under (b)(2) does not affect the determination of the underlying yield of the Project because the statutory definition of yield incorporates specific, fixed conditions which are not affected by subsequent actions to use the dedicated water. The accounting system thus provides the means for assuring compliance with the statutory directive to dedicate and manage a specified quantity of project yield annually.

I. CALCULATION OF YIELD

Attachment 1, entitled “Calculation of Central Valley Project Yield for Section 3406(b)(2) of the Central Valley Project Improvement Act,” describes the calculation of CVP yield for purposes of (b)(2). In summary, the calculation set out in Attachment 1 is based on the average delivery capability of the Project during the 1928-1934 period, adjusted to reflect requirements in effect on the date of CVPIA enactment (October 30, 1992). The CVP yield as calculated for (b)(2) purposes is 5,826,000 acre feet. That total is slightly greater than the yield identified in the July 14, 1999 Interim Decision and reflects a correction of an error in the modeling. Of that amount, Congress has directed that 800,000 acre-feet¹ be dedicated for the purposes set out in (b)(2). As noted above, under the statutory scheme, the calculation of Project yield is not affected by annual actions to dedicate and manage the 800,000 acre feet.

In response to public comments and its consultations with the State of California, Interior has modified Attachment 1 as follows:

- C Pages 1 and 3, clarified the definition of storage.
- C Pages 1, 3, and 7, changed the phrase “Delta Exports” to “Delta Division” to more accurately capture all the Delta components.
- C Page A-3, added text to the discussion of Clear Creek Basin criteria, to provide the references for the minimum flows.
- C Page A-4, clarified language explaining the basis for flows in the American River Basin.

II. PROCESS AND ACCOUNTING

The accounting methods and procedures set out in this Decision have been developed to provide a guide for, and verification of, Interior’s compliance with the statutory requirement that 800,000 acre feet of CVP yield be dedicated and managed annually.

- A. **Accounting Period.** The accounting period for determining the use of CVP yield dedicated under section 3406(b)(2) (hereinafter (b)(2) water) will be October 1 through September 30.

Explanation: The water year October 1 through September 30 begins with the onset of the yearly precipitation season and is the same water year that has traditionally been used at irrigation projects throughout the West. (See U.S. Geological Survey Circular 1123, 1995).

In contrast, CVP water service contracts currently are based on a year that runs from March 1 to

¹ CVPIA Section 3406(b)(2)(C) provides that water dedicated to (b)(2) purposes may be reduced up to 25 percent when deliveries to agricultural contractors are reduced because of hydrologic circumstances.

February 28. This period reflects the beginning of the irrigation and growing season for the majority of crops within the CVP, and promotes efficiency in allowing agricultural and municipal contractors opportunities for better planning.

Just as the Bureau of Reclamation (Reclamation) selected a contracting period that would promote efficiency for water service contractors, Interior has selected an accounting period to promote more efficient use of the (b)(2) water for fishery purposes. The accounting period of October 1 through September 30 will allow the Fish Wildlife Service (FWS) to prescribe spring fishery actions with a more complete knowledge of the year's hydrology and the amount of (b)(2) water actually used for the fall/winter actions. Consequently, this will result in management prescriptions that make the most accurate and effective use of the dedicated water. If the March to February year were used, FWS would have to speculate on the fall/winter hydrology (the period when reservoirs are refilled by fall and winter storms) and the impacts of fall/winter actions to storage when it prescribed the spring measures, potentially resulting in the dedication of too much or too little of the 800,000 acre feet (AF).

B. Accounting Methodology.

The appropriate accounting methodology for the dedication and management of CVP yield for (b)(2) purposes depends upon where in the project the water is used and at what time of year it is used. The measurement methods, or metrics, set out below have been adopted to account for those differences. Measurement of water banked, transferred or exchanged will be accounted as set out in section III.

- 1. Upstream Actions - October 1 through January 31.** Upstream fishery actions from October 1 through January 31 will be accounted as the difference between the cumulative net change in storage in upstream reservoirs (Shasta, Trinity, Folsom, New Melones) at the end of the period with the fishery actions and the cumulative net change in storage that would have resulted from simulated CVP operations during the same period without the fishery actions.

Explanation: The change-in-storage metric for the fall/winter period (October – January) was selected because, during this period, Project storage is generally being accumulated for release later in the year. Changes in storage resulting from the fishery measures will affect the delivery capability of the Project and are an accurate indicator of impacts to the upstream component of yield.

The ending date (January 31) for the fall/winter accounting period is the same date used for other data (e.g., snowpack, anticipated storage) that form the basis of the Project's February 15 water allocation determination, on which irrigators generally base their spring planting decisions. Similarly, the January 31 date for the end of the change-in-storage metric will allow Interior to determine the amount of (b)(2) water remaining to be dedicated in the water year (i.e., 800,000

AF less net cumulative change in storage as of January 31), and to incorporate that amount into its determination of February allocations to contractors and forecasted project operations for the remainder of the accounting period.

After water released for upstream actions in this period has served the purpose for which its release was prescribed, it is available for recapture and reuse by the Project, including for export south of the Delta. Water released solely for an upstream fishery action under this section II.B.1 is not available for banking, transfer or exchange under section III, and shall be accounted solely under this section. On the other hand, banking, transfer, or exchanges of b(2) water released under section II.B.1 can occur during this period if the water is identified for banking, transfer or exchange before it is released. Such releases will be accounted solely for under the applicable provisions of section III.

2. Upstream Actions - February 1 through September 30.

a. Accounting Methodology: Upstream fishery actions from February 1 through September 30 will be accounted as the change (increase or decrease) in releases from storage from upstream reservoirs² with the fishery actions, compared to releases from storage that would have resulted from simulated CVP operations during the same period without the fishery actions. The calculation of change in release with the fishery measures will be based on daily changes in releases resulting from the (b)(2) measures prescribed by FWS, accumulated over the period.

Explanation: The metric for upstream actions from February through September (releases from storage) reflects the amount of Project yield dedicated to (b)(2) purposes through those actions. Under this metric, the net change in releases will be used in the calculation of (b)(2). For example, increased releases from Shasta Reservoir for fishery purposes may permit Reclamation to reduce planned releases from Folsom Reservoir while still meeting project obligations. The reduced releases from Folsom Reservoir would commensurately offset the increased releases from Shasta Reservoir in the (b)(2) calculation.

b. Upstream Releases may Flow through Delta: If specified by FWS, based on a written assessment of biological benefits to the fishery, Reclamation will allow upstream releases in the February – September period to flow through the Delta. Upstream releases specified to flow through the Delta will be accounted solely under this provision, and not as Delta actions.

² Releases from Trinity Reservoir for Trinity River flows pursuant to 3406(b)(23) of the CVPIA are excluded from the accounting under this provision.

Explanation: Releases from upstream storage are frequently needed to assist juvenile anadromous fish in their downstream migration to move safely through the Delta into saline water. This provision will permit the upstream releases to assist in the downstream migration when specified by FWS. It applies only in the February through September period because that is generally when Delta outflows will be needed to move the fish through the Delta into saline water. Releases specified to flow through the Delta will be excluded from the calculation of the export/inflow ratio necessary to meet Water Quality Control Plan (WQCP) requirements. (The WQCP requires that exports not exceed a certain percentage of inflow into the Delta. If the water released for (b)(2) purposes were included as inflow in the export/inflow ratio, a portion of the water could be exported and the full benefit of the outflow through the Delta would not be realized.) If FWS specifies that the release is needed for Delta outflow, Interior will take steps as needed to protect the specified flows, including obtaining a California Water Code Sec. 1707 permit.

If FWS does not specify that the release is needed for Delta outflow, it is available for recapture and reuse by the Project, including for export south of the Delta. Water released solely for an upstream fishery action under this section II.B.2 is not available for banking, transfer or exchange under section III and shall be accounted solely under this section. On the other hand, water released under this section II.B.2 can occur if the water is identified for banking, transfer, or exchange before it is released. Such releases will be accounted for solely under the applicable provisions of section III.

3. Delta Actions that affect Exports - October 1 through September 30.

a. Accounting Methodology: Delta actions that affect exports will be accounted throughout the water year as the reduction in exports from the Delta resulting from the prescribed fishery actions.

Explanation: This metric applies only to those actions in the Delta which affect exports. The metric of export reduction for such Delta measures was selected because it is the most accurate indicator of the impact of the fishery measures on Project yield south of the Delta. Actions designed to affect conditions in the Delta that entail releases from upstream reservoirs and that do not reduce exports will be accounted using the applicable upstream metric.

b. Limitation on Delta Actions – February 1 to August 31: During the period February 1 to August 31 (the “low point” for CVP storage in San Luis Reservoir), (b)(2) prescriptions for export reductions will be limited to a maximum of 640,000 AF (80 percent of 800,000 AF of (b)(2) water). This maximum amount (640,000 AF) will be reduced during times of shortage, as determined under CVPIA Section 3406(b)(2)(C) and in accordance with the shortage criteria set out in section V below, to 80 percent of the reduced amount of (b)(2) water.

Explanation: This provision is intended to manage impacts to deliveries south of the Delta prior

to the San Luis Reservoir low point in late August. The provision is based on an 80%-20% ratio of unconstrained water supply capability before and after the low point. Under unconstrained conditions, the pumping and storage capability of the Project can provide 80 percent of the annual water supply prior to August 31 (the San Luis Reservoir low point) and 20 percent following the low point. Interior will apply that same constraint on its designation of (b)(2) measures affecting exports south of the Delta. The CVPIA provides that the 800,000 acre feet dedicated under (b)(2) can be reduced by up to 25 percent during times of drought. If the amount dedicated under (b)(2) is reduced pursuant to this provision, the maximum amount used for (b)(2) in the Delta during this time period will be reduced as well.

C. Accounting Process

To assist Interior in implementing the methodology and (b)(2) policy set forth in the final decision, Interior has established a B2 Interagency Team (B2IT). Interior will seek the participation of the California Department of Water Resources (DWR) and the California Department of Fish and Game (DFG) in this team. With the State agreement and participation, this interagency team of project operators and project and resource agency biologists will consist of representatives from the following agencies: DWR; DFG; Reclamation; FWS; and National Marine Fisheries Service (NMFS).

To assist the B2IT and Interior in developing the annual actions to dedicate and manage the 800,000 acre feet, Interior has established a stakeholder process as described in Attachment 2. The stakeholder process will be used as an opportunity for the project operators and resource agencies to present and discuss information and seek input regarding the development of the annual b(2) fishery action plan and how the plan is integrated into the operations forecast. This will be accomplished through bi-annual workshops with all interested parties as described in Attachment 2.

1. Reclamation's Forecast. Reclamation will provide FWS a preliminary 12-month baseline forecast of operations on the 15th day of each month, to be updated monthly thereafter. The forecast will be based on the applicable CVP Operations Criteria and Plan (OCAP). Reclamation intends to revise the current OCAP following issuance of the Record of Decision on the CVPIA Programmatic Environmental Impact Statement and the decision by the State Water Resources Control Board on the water quality control plan implementation.

2. FWS Schedule. FWS will submit to Reclamation its 12-month schedule for fishery measures, including proposed transfers, exchanges and banking, on the first day of each month, to be updated monthly thereafter. Based on end-of-September storage conditions and anticipated OCAP operations for the fall and winter months, FWS will target a maximum of 200,000 - 350,000 acre-feet of (b)(2) water to be used to implement upstream fall/winter releases for fishery purposes. These measures will be adjusted periodically, as the season's hydrology evolves and CVP operations respond, to stay within the target and retain sufficient (b)(2) water to

implement desired spring/summer measures, both in the Delta and upstream.

3. Monthly and Final Accounting: Reclamation and the FWS will jointly develop an initial accounting of (b)(2) water on the 15th day of every month showing the current accounting for that accounting year as of the end of the previous month. To assist in making preliminary allocations for the coming contract year, initial assessments of the amount of (b)(2) water used for the fall/winter measures will be made just prior to the preliminary allocations on February 15 of each year. An accounting of the amount of (b)(2) water used for these actions during the October-January period will be completed by March 15 of each year. Final accounting for all (b)(2) actions during the entire water year will be calculated by October 31.

III. WATER BANKING AND TRANSFER/EXCHANGES OF WATER

A. Banking: Subject to section III.C below, the FWS may bank (b)(2) water in CVP or non-CVP facilities for fish and wildlife purposes. Any amount banked within the reservoir of origin will be accounted as (b)(2) water on a one-to-one basis at the time it is banked. Any water banked elsewhere shall be accounted on a one-to-one basis only once, at the time it is released from the reservoir of origin. Any banked water shall be accounted solely under this provision, regardless of the time of storage or release. The amount banked will not be included for any purpose in the accounting of (b)(2) water under II.B.1 or 2, above.

B. Transfers to or exchanges with other water users: Subject to section III.C below, the FWS may transfer or exchange water from upstream CVP reservoirs to or with other CVP water users or non-CVP water users during any part of the water year to accomplish (b)(2) purposes. Any amount transferred or exchanged shall be accounted as (b)(2) water on a one-to-one basis as released from the reservoir of origin, and shall be accounted solely under this provision. FWS may transfer or exchange (b)(2) water from San Luis Reservoir only to the extent that it has delivered (b)(2) water to that reservoir. The amount transferred or exchanged will not be included for any purpose in the computation of (b)(2) water under II.B.1 or II.B.2.

C. Limitations: The costs of any banking, storage, diversion or delivery (applicable cost of service rate) necessary to carry out the banking, transfers, and exchanges under this section, including carriage water costs and/or other costs normally incurred with a transfer, exchange, or banking, will be arranged by FWS. Any accomplishment of a transfer, exchange, or banking of water will be dependent upon the capability of the conveyance and/or storage facilities involved. Water transfers, exchanges or banking must comply with state water law and include appropriate environmental documentation. Priority of access to storage or conveyance capacity must be arranged by FWS before or at the time of the transfer, exchange, or banking transaction. The transfer, exchange, and/or banking of (b)(2) water cannot interfere with the storage, diversion, or delivery of water for other purposes of the CVP.

IV. WATER TO MEET WQCP REQUIREMENTS

During the life of the Bay/Delta Accord, Interior will continue to fulfill the commitment in the Accord that all CVP water provided to meet the Accord will be credited toward the (b)(2) obligations. Following expiration of the provisions of the Accord governing (b)(2) credits, Interior will continue to credit the amount of water provided to meet the 1995 Delta Water Quality Control Plan (WQCP) requirements toward (b)(2), up to a cap of 450,000 acre-feet annually unless the FWS determines that it is a biological priority to credit water above that cap toward (b)(2).

The Bay/Delta Accord provides that all project water provided pursuant to the Accord shall be credited toward the (b)(2) obligation to provide 800,000 acre-feet, and does not expressly set out a cap on that commitment. At the time the Accord was signed in 1994, however, it was assumed that the combined CVP and SWP water costs associated with it would not exceed one million acre-feet, one half of which would be borne by the CVP. Of that amount, the CVP share of the fishery measures in the Accord was estimated to be a maximum of 450,000 AF. The State Water Resources Control Board is currently conducting hearings to allocate responsibility for meeting the WQCP standards. That decision is expected in mid-2000. Upon expiration of the Accord provisions on responsibility for meeting the standards, Interior will continue to credit up to 450,000 AF of CVP water used to meet the WQCP obligations toward the (b)(2) requirements, consistent with the assumptions underlying the Accord. An additional amount may be credited based upon a written assessment by FWS that it is the highest biological priority for use of the remaining (b)(2) water.

V. SHORTAGE CRITERIA

CVPIA Section 3406(b)(2)(C) provides: “The Secretary may temporarily reduce deliveries of the quantity of water dedicated . . . up to 25 percent of such total whenever reductions due to hydrologic circumstances are imposed upon agricultural deliveries of CVP water.” The Shasta Criteria, which are in existing San Joaquin River Exchange Contracts and which set out a formula for reducing deliveries to those senior water rights holders during hydrologically dry periods, will be used to define the hydrologic circumstances that trigger the provisions of Section 3406(b)(2)(C). For developing operation plans, the 90 percent-exceedance hydrologic forecast will be used.

VI. COORDINATION

Interior recognizes that the implementation of Section 3406(b)(2) will be important in the preparation of a Water Management Strategy that is an integral part of the CALFED Bay-Delta

Stage I Program. To better coordinate the (b)(2) policy and CALFED, the B2IT will serve as a subgroup to the CALFED Operations Group. The CALFED Operations Group will assist Interior in coordinating the b(2) fishery action plan with other operational programs or resource related aspects to protect and restore the Bay-Delta. Such an interrelationship will also serve as an opportunity, in addition to the workshops described in Attachment 2, for stakeholders to interact with the project operators and resource agency staff. Project operators and resource agency staff will use this opportunity to update stakeholders on the progress of implementing provisions of this Decision and to receive input.

In preparation for the implementation of Stage I of the Bay-Delta Program, the B2IT will coordinate with CALFED in the development and implementation of an Environmental Water Account and Water Management Strategy. This coordination initially will take place through the CALFED Water Management Coordination Team. Coordination of the Decision is essential in accomplishing a coordinated program to support the environmental restoration goals of the program.

Section 3406(b)(2)(B) provides that the water dedicated under (b)(2) shall be managed pursuant to conditions specified by the FWS after consultation with Reclamation and the California Department of Water Resources (DWR) and in cooperation with the California Department of Fish and Game. In addition, FWS, in managing for anadromous fish species, routinely coordinates and consults with the National Marine Fisheries Service. It is Interior's intent to accomplish much of this coordination through participation and discussion with stakeholders and state and federal agencies in the CALFED process described above. Additional coordination with these and other agencies and stakeholders will also be necessary and will be carried out.

Interior's policy is that (b)(2) actions will not be permitted to adversely affect the State Water Project (SWP), operated by DWR, and that any adverse impacts will be made up. However, this policy does not extend to impacts to the SWP that result from its obligations under either the WQCP or Endangered Species Act. Interior believes that any gains that the SWP accrues from release of (b)(2) water from upstream reservoirs should be credited against any impacts to the SWP, as a result of (b)(2) actions that would otherwise have to be made up. Interior will meet with DWR to agree on make-up obligations and credits against such obligations. As a result of the consultation with the State, Interior and the State have determined that these issues would be best addressed as a part renegotiating the COA. Therefore, Interior and the State have committed to an expedited schedule for renegotiating the COA.